

United States Environmental Protection Agency  
Region 8, Air Program  
1595 Wynkoop Street  
Denver, CO 80202



**Air Pollution Control  
Minor Source Permit to Construct**

**40 CFR 49.151**

**# SMNSR-UO-000817-2016.001**

*Permit to Construct to establish legally and practically enforceable  
limitations and requirements on sources at an existing facility.*

**Permittee:**

Anadarko Uintah Midstream, LLC

**Permitted Facility:**

Archie Bench Compressor Station  
Uintah and Ouray Indian Reservation  
Uintah County, Utah

## Summary

On November 8, 2016, the EPA received an application from Anadarko Uintah Midstream, LLC (Anadarko), requesting a synthetic minor permit for the Archie Bench Compressor Station (Archie Bench) in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program.

This permit action will apply to an existing facility operating on the Uintah and Ouray Indian Reservation in Utah. The physical location is Latitude 39.956212N, Longitude -109.41146W, in Uintah County, Utah.

This permit does not authorize the construction of any new emission sources, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. This permit is intended only to incorporate required and requested enforceable emission limits and operational restrictions from a March 27, 2008, federal Consent Decree (CD) between the United States of America (Plaintiff), and the state of Colorado, the Rocky Mountain Clean Air Action and the Natural Resources Defense Council (Plaintiff-Intervenors), and Kerr-McGee Corporation (Civil Action No. 07-CV-01034-EWN-KMT) and the November 8, 2016 synthetic MNSR application. Anadarko has requested legally and practically enforceable requirements for the installation and operation of a catalytic control system on three (3) field gas-fired 4-stroke lean-burn (4SLB) reciprocating internal combustion engines (used for field gas compression at the facility), including associated carbon monoxide (CO) control efficiency requirements, consistent with the CD. Anadarko also requested an enforceable requirement to install and operate only low-bleed, no-bleed, or instrument air-driven pneumatic controllers, consistent with the CD.

Upon compliance with the permit, Anadarko will have legally and practically enforceable restrictions on emissions that can be used when determining the applicability of other Clean Air Act (CAA) permitting requirements, such as those imposed by the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52 and the Title V Operating Permit Program at 40 CFR part 71 (Part 71 Permit Program).

The EPA has determined that issuance of this MNSR permit will not contribute to National Ambient Air Quality Standards (NAAQS) violations, or have potentially adverse effects on ambient air quality.

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PROPOSED

## **I. Conditional Permit to Construct**

### **A. General Information**

Facility: Anadarko Uintah Midstream, LLC – Archie Bench Compressor Station

Permit Number: SMNSR-UO-000817-2016.001

SIC Code and SIC Description: 1311- Crude Petroleum and Natural Gas

<u>Site Location:</u> Archie Bench Compressor Station SW/SW Sec 12 T10S R22E Uintah and Ouray Indian Reservation Uintah County, Utah Latitude 39.956212N, Longitude -109.41146W	<u>Corporate Office Location</u> Anadarko Uintah Midstream, LLC P.O. Box 173779 Denver, Colorado 80202-3779
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The equipment listed in this permit shall be operated by Anadarko Uintah Midstream, LLC at the location described above.

### **B. Applicability**

1. This federal Permit to Construct is being issued under authority of the MNSR Permit Program.
2. The requirements in this permit have been created, at the Permittee's request and pursuant to the MNSR permit program, to establish legally and practically enforceable emissions restrictions for pneumatic controllers and control of CO emissions from field gas-fired engines.
3. Any conditions established for this facility or any specific units at this facility pursuant to any permit issued under the authority of the PSD Permit Program or the MNSR Permit Program shall continue to apply.
4. By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, Owner and/or Operator, if the conditions of this permit are not met by the Permittee, Owner and/or Operator.

### **C. Requirements for 4SLB Compressor Engines**

#### **1. Construction and Operational Requirements**

- (a) The Permittee shall install and operate emission controls as specified in this permit on three (3) existing engines used for field gas compression, all meeting the following specifications:
  - (i) Operated as a 4-stroke lean-burn engine;
  - (ii) Fired with field gas; and
  - (iii) Three (3) engines limited to a maximum site rating of 1,340 horsepower (hp).

- (b) Only the engines that are operated and controlled as specified in this permit are approved for installation under this permit.

## 2. Control, Operation and Maintenance Requirements

- (a) The Permittee shall install, continuously operate and maintain a catalytic control system on each engine that is capable of reducing the uncontrolled emissions of CO by at least 93.0% by weight when the engine is operating at a 90% load or higher.
- (b) The Permittee shall follow, for each engine and its respective catalytic control system, the manufacturer's recommended maintenance schedule and procedures or equivalent procedures developed by the Permittee or vendor, to ensure optimum performance of each engine and its respective catalytic control system to ensure compliance with the CO control efficiency requirement in this permit.
- (c) The Permittee may rebuild an existing permitted engine or replace an existing permitted engine with an engine of the same hp rating, and configured to operate in the same manner as the engine being rebuilt or replaced. Any operational requirements, control technologies, testing or other provisions that apply to the engines that are rebuilt or replaced shall also apply to the replacement engines.
- (d) The Permittee may resume operation without the catalytic control system during an engine break-in period, not to exceed 200 operating hours, for any rebuilt or replaced engines.

## 3. Performance Test Requirements

- (a) Performance tests shall be conducted on each engine and catalytic control system for measuring CO to demonstrate compliance with the control efficiency requirement specified in this permit. The performance tests shall be conducted in accordance with the Carbon Monoxide Control Efficiency Portable Analyzer Monitoring Protocol in Appendix A of this permit to measure the oxygen (O<sub>2</sub>) and CO concentrations at the inlet (pre-catalyst) and outlet (post-catalyst) of the catalytic control system.
  - (i) Initial performance tests shall be conducted no later than 60 calendar days after installation of the catalytic control system, including installation of the catalytic control system on engines that are rebuilt or replaced. The results of initial performance tests conducted prior to the effective date of this permit may be used to demonstrate compliance with the initial performance test requirements, provided the tests were conducted in an equivalent manner as the performance test requirements in this permit.
  - (ii) Subsequent performance tests shall be conducted semi-annually on each engine. After compliance is demonstrated for two (2) consecutive tests, the testing frequency may be reduced to annually. If an annual test indicates non-compliance, then the Permittee shall resume semi-annual testing.
- (b) The Permittee may submit to the EPA a written request for approval of alternate test methods, but shall only use the alternate test methods after obtaining written approval

from the EPA.

- (c) The Permittee shall not perform engine tuning or make any adjustments to engine settings, catalytic control system settings, processes or operational parameters immediately prior to the engine testing or during the engine testing. Any such tuning or adjustments may result in a determination by the EPA that the test is invalid.
- (d) The Permittee shall not abort any engine tests that demonstrate non-compliance with the CO control efficiency requirement specified in this permit.
- (e) All performance tests conducted on the engines shall meet the following requirements:
  - (i) Each test shall consist of at least two (2) consecutive 21-minute or longer valid test runs, one (1) pre-catalyst run and one (1) post-catalyst run;
  - (ii) The CO control efficiency shall be determined based on the pre- and post-catalyst CO measurements;
  - (iii) If the catalyst fails to meet the CO control efficiency requirement specified in this permit, appropriate steps shall be taken to correct the deficiency and the catalyst shall be retested within 30 days after the failed test;
  - (iv) Performance test plans for alternate test methods shall be submitted to the EPA for approval at least 60 calendar days prior to the date the test is planned; and
  - (v) Alternate test plans shall include and address the following elements:
    - (A) Purpose of the test;
    - (B) Engines and catalytic control systems to be tested;
    - (C) Expected engine operating rate(s) during the test;
    - (D) Sampling and analysis procedures (sampling locations and test methods);
    - (E) Quality assurance plan (calibration procedures and frequency and field documentation; and
    - (F) Data processing and reporting (description of data handling and quality control procedures, report content).
- (f) The Permittee shall notify the EPA at least 30 calendar days prior to scheduled performance testing. The Permittee shall notify the EPA at least 1 week prior to scheduled performance testing if the testing cannot be performed.
- (g) If a permitted engine is not operating, the Permittee does not need to start up the engine solely to conduct the subsequent performance test. The subsequent performance test requirements apply when the engine is restarted and operates more than 720 consecutive hours (or 30 consecutive days) in a given semi-annual period. If an engine for which the EPA has been notified of a scheduled test is permanently shut down prior to testing, the Permittee does not need to start up the engine solely to conduct the performance test.

#### 4. Recordkeeping Requirements

- (a) Records shall be kept of manufacturer and/or vendor specifications for each engine, catalytic control system and portable analyzer.
- (b) Records shall be kept of all calibration and maintenance conducted for each engine,

catalytic control system and portable analyzer.

- (c) Records shall be kept of all required testing in this permit. The records shall include the following:
  - (i) The date, place and time of portable analyzer measurements;
  - (ii) The company or entity that performed the portable analyzer measurement;
  - (iii) The portable analyzer measurement techniques or methods used;
  - (iv) The results of such measurements; and
  - (v) The operating conditions as existing at the time of measurement.
- (d) Records shall be kept of all engine rebuilds and engine replacements.
- (e) Records shall be kept of each rebuilt or replaced engine break-in period, pursuant to the requirements of this permit, where the existing engine that has been rebuilt resumes operation without the catalyst control system for a period not to exceed 200 hours.
- (f) Records shall be kept of each time a deviation in the CO control efficiency required in this permit is detected for an engine. The Permittee shall include in the record the cause of the problem, the corrective action taken and the timeframe for bringing the CO control efficiency into compliance.

- 5. Requirements under **Section C. Requirements for 4SLB Compressor Engines** shall be effective upon termination of the March 27, 2008, federal CD between the United States of America (Plaintiff), and the state of Colorado, the Rocky Mountain Clean Air Action and the Natural Resources Defense Council (Plaintiff-Intervenors), and Kerr-McGee Corporation (Civil Action No. 07-CV-01034-EWN-KMT).

#### **D. Requirements for Pneumatic Controllers**

- 1. The Permittee shall not operate any high-bleed pneumatic controllers. High-bleed controllers are defined as any controller with the capacity to bleed in excess of 6 standard cubic feet of gas (scf) per hour (50,000 scf per year) in normal operation. The Permittee is not required to install low or no-bleed pneumatic controllers if the use of low or no-bleed pneumatic devices is not technically or operationally feasible.
- 2. Records shall be kept of manufacturer's and/or vendor's specifications for each pneumatic controller that is not operated using instrument air.
- 3. Records shall be kept of the determination for each high-bleed pneumatic controller that is installed and operated if the use of low or no-bleed pneumatic devices is not technically or operationally feasible.
- 4. Requirements under **Section D. Requirements for Pneumatic Controllers** shall be effective upon termination of the March 27, 2008, federal CD between the United States of America (Plaintiff), and the state of Colorado, the Rocky Mountain Clean Air Action and the Natural Resources Defense Council (Plaintiff-Intervenors), and Kerr-McGee Corporation (Civil Action No. 07-CV-01034-EWN-KMT).

**E. Requirements for Records Retention**

1. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.
2. Records shall be kept in the vicinity of the facility, such as at the facility, the location that has day-to-day operational control over the facility or the location that has day-to-day responsibility for compliance of the facility.

**F. Requirements for Reporting**

1. Test reports shall be submitted within 60 days after each required initial engine and catalytic control system performance test.
2. The Permittee shall submit a report to the EPA no later than 30 days after each retest after a failed initial test. The retest report shall include a summary of the steps taken to comply and the retest results.
3. Annual Reports
  - (a) The Permittee shall submit a written annual report of all required monitoring and testing conducted on emission units at the facility covered under this permit each year no later than March 1<sup>st</sup>. The annual report shall cover the period for the previous calendar year. All reports shall be certified to truth and accuracy by the person designated by the Permittee as responsible for CAA compliance for the facility.
  - (b) The report shall include:
    - (i) A summary of the results of each required initial engine and catalytic control system performance test;
    - (ii) Test reports for all required subsequent engine and catalytic control system performance tests; and
    - (iii) A summary of all deviations of permit conditions and corrective actions taken, per paragraph I.F.5. of this permit.
4. All documents required to be submitted under this permit shall be submitted to:

U.S. Environmental Protection Agency, Region 8  
Office of Enforcement, Compliance & Environmental Justice  
Air Toxics and Technical Enforcement Program, 8ENF-AT  
1595 Wynkoop Street  
Denver, Colorado 80202

Documents may be submitted via electronic mail to [R8AirReportEnforcement@epa.gov](mailto:R8AirReportEnforcement@epa.gov).
5. The Permittee shall promptly submit to the EPA a written report of any deviations of control or operational limits specified in this permit and a description of any corrective actions or



preventative measures taken. A “prompt” deviation report is one that is post marked or submitted via electronic mail to [r8airreportenforcement@epa.gov](mailto:r8airreportenforcement@epa.gov) as follows:

- (a) Within 30 days from the discovery of a deviation that would cause the Permittee to exceed the control or operational limits in this permit if left uncorrected for more than 5 days after discovering the deviation; and
- (b) By March 1<sup>st</sup> for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee’s ability to meet the control or operational limits, included as part of the Annual Reports required in this permit.

6. The Permittee shall submit any record or report required by this permit upon EPA request.

## **II. General Provisions**

### **A. Conditional Approval**

Pursuant to the authority of 40 CFR 49.151, the EPA hereby conditionally grants this permit to construct. This authorization is expressly conditioned as follows:

- 1. *Document Retention and Availability:* This permit and any required attachments shall be retained and made available for inspection upon request at the location set forth herein.
- 2. *Permit Application:* The Permittee shall abide by all representations, statements of intent and agreements contained in the application submitted by the Permittee. The EPA shall be notified 10 days in advance of any significant deviation from this permit application as well as any plans, specifications or supporting data furnished.
- 3. *Permit Deviations:* The issuance of this permit may be suspended or revoked if the EPA determines that a significant deviation from the permit application, specifications and supporting data furnished has been or is to be made. If the proposed source is constructed, operated or modified not in accordance with the terms of this permit, the Permittee will be subject to appropriate enforcement action.
- 4. *Compliance with Permit:* The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted facility/source. Noncompliance with any permit term or condition is a violation of this permit and may constitute a violation of the CAA and is grounds for enforcement action and for a permit termination or revocation.
- 5. *Fugitive Emissions:* The Permittee shall take all reasonable precautions to prevent and/or minimize fugitive emissions during the construction period.
- 6. *NAAQS and PSD Increments:* The permitted source shall not cause or contribute to a NAAQS violation or a PSD increment violation.
- 7. *Compliance with Federal and Tribal Rules, Regulations, and Orders:* Issuance of this permit

does not relieve the Permittee of the responsibility to comply fully with all other applicable federal and tribal rules, regulations and orders now or hereafter in effect.

8. *Enforcement:* It is not a defense, for the Permittee, in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
9. *Modifications of Existing Emissions Units/Limits:* For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emissions unit allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to the MNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or MNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).
10. *Relaxation of Legally and Practically Enforceable Limits:* At such time that a new or modified source within this permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.
11. *Revise, Reopen, Revoke and Reissue, or Terminate for Cause:* This permit may be revised, reopened, revoked and reissued or terminated for cause. The filing of a request by the Permittee, for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen this permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the Permittee fails to assure compliance with the applicable requirements.
12. *Severability Clause:* The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.
13. *Property Rights:* This permit does not convey any property rights of any sort or any exclusive privilege.
14. *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating this permit or to determine compliance with this permit. For any such information claimed to be confidential, the Permittee shall also submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.
15. *Inspection and Entry:* The EPA or its authorized representatives may inspect this permitted facility/source during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:
  - (a) Enter upon the premises where this permitted facility/source is located or emissions-

related activity is conducted, or where records are required to be kept under the conditions of this permit;

- (b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;
- (c) Inspect, during normal business hours or while this permitted facility/source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements; and
- (e) Record any inspection by use of written, electronic, magnetic and photographic media.

16. *Permit Effective Date:* This permit is effective immediately upon issuance unless a later effective date is specified in the permit, or unless comments resulted in a change in the proposed permit, in which case this permit is effective 30 days after issuance. If within 30 days after the service of notice of the final permit issuance, a person petitions the Environmental Appeals Board to review any condition(s) of the final permit in accordance with 40 CFR 49.159(d), the specific terms and conditions of the permit that are the subject of the request for review must be stayed.

17. *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

U.S. Environmental Protection Agency, Region 8  
Office of Partnerships & Regulatory Assistance  
Tribal Air Permitting Program, 8P-AR  
1595 Wynkoop Street  
Denver, Colorado 80202

18. *Invalidation of Permit:* Unless this permitted source of emissions is an existing source, this permit becomes invalid if construction is not commenced within 18 months after the effective date of this permit, construction is discontinued for 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the construction of the approved phases of a phased construction project. The Permittee shall commence construction of each such phase within 18 months of the projected and approved commencement date.

19. *Notification of Start-Up:* The Permittee shall submit a notification of the anticipated date of initial startup of this permitted source to the EPA within 60 days of such date, unless this permitted source of emissions is an existing source.

**B. Authorization**

Authorized by the United States Environmental Protection Agency, Region 8

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Monica S. Morales  
Director, Air Program  
Office of Partnerships & Regulatory Assistance

Date

PROPOSED

## **Appendix A**

### **Carbon Monoxide Control Efficiency Portable Analyzer Monitoring Protocol**

[Copy of Appendix F to the CD in the matter of United States of America and the State of Colorado V. Kerr-McGee Corporation (Civil Action No. 07-CV-01034-EWN-KMT), Carbon Monoxide Control Efficiency Portable Analyzer Monitoring Protocol]

PROPOSED